

REMARKS

Claims 1 to 38 are all the claims pending in the application, prior to the present Amendment.

The Examiner has not acknowledged applicants' claim for foreign priority or receipt of the certified copies of the foreign priority documents. Applicants request the Examiner to make such acknowledgments.

Claims 2 and 3 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

The Examiner sets forth a number of reasons for this rejection. Applicants discuss these reasons below. Before discussing these reasons, applicants note that the recitations of claims 2 and 3 have been incorporated into claim 1. Accordingly, the following discussion applies to the terms that now appear in claim 1.

The Examiner states that in claim 2, the phrase "the maximum particle size is 63 μm or less" is meaningless. The Examiner states a maximum point can have only one value.

In response, applicants submit that the phrase "the maximum particle size is 63 μm or less" is not meaningless or unclear. The term "maximum particle size" is defined in the present specification at page 13, lines 27 to 29 as follows: "The maximum particle size as used in the present invention is an accumulated 100% particle size in the cumulative particle size distribution of the inorganic powder."

As one of ordinary skill in the art would understand, each specific powder has a maximum particle size. The maximum particle size in claim 1 is not defining a specific maximum particle size for a single powder, but is reciting the range of maximum particle sizes that can be employed in the various powders that are within the scope of the present invention.

For example, the powders E to H in Examples 5 to 8 each had a maximum particle size of 31.1 μ m. These particles do not have a maximum particle size of 63 μ m, but are within the range of 63 μ m or less that is defined in claim 1. Thus, a maximum particle size of 31.1 μ m is covered by the term “or less” that appears in claim 1.

The Examiner states that in claim 2, the term “mode size” as recited is unclear as it is incomplete.

In addition, the Examiner states claim 3 suffers the same deficiency of claim 2 with regard to the term “mode size.”

The Examiner does not set forth any reason why she believes the term is incomplete.

The present specification discloses at page 14, lines 2 to 4 that the “mode size is a particle size showing a highest mode value in the frequency-size distribution of the inorganic powder.”

Since the specification defines what is meant by the term “mode size,” applicants submit that nothing more need be said about it in the claim, and that one of ordinary skill in the art would understand the meaning of this term in view of its definition in the specification.

In view of the above, applicants submit that the claims comply with the requirements of the second paragraph of 35 U.S.C. § 112 and, accordingly, request withdrawal of this rejection.

Claims 1, 11, and 16-19 have been rejected under 35 U.S.C. 102(b) as being anticipated by JP 56-000,834.

Applicants have amended claim 1 to include recitations from claim 2 to 5. Since these claims were not included in the rejection, applicants submit that this rejection has been overcome.

Applicants note that with respect to the recitation in original claim 4 relating to mass percent, applicants, in amending claim 1 have changed the lower limit of the percentage of

particles having a particle size of 8 μm or more particles to 65 mass%. This value is obtained by subtracting from 100% the upper value of the percentage of particles having a particle size of less than 2 μm , namely, 20 mass%, and the upper value of the percentage of particles having a particle size of from 2 to 8 μm , namely, 15 mass%.

Claims 1-6, 11, and 16-19 have been rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 6,284,829 to Dalbe et al.

Applicants submit that Dalbe et al do not disclose or render obvious the subject matter of present claims as amended above and, accordingly, request withdrawal of this rejection.

As a result of the amendment to claim 1, Examples 1 to 4 and 8 of the present application are outside the scope of the present claims because the percentage of particles having a particle size of from 2 to 8 μm in Examples 1 to 4 is greater than 15 mass% and the percentage of particles having a particle size of less than 2 μm in Example 8 is more than 20 mass%.

As is clear from a comparison of Examples 5 to 7 which are within the scope of the present claims with Examples 1 to 4 which are outside the scope of the present claims and Comparative Examples 1 to 4 which are outside the scope of the present claims, the inorganic powder of the presently claimed invention exhibits excellent performance in both of dielectric breakdown strength and epoxy resin viscosity, when the percentage of particles having a particle size of from 2 to 8 μm is from 0 to 15 mass%. The combination of these results was not achieved when the percentage of particles having a particle size of from 2 to 8 μm was more than 15 mass%.

Dalbe et al neither disclose nor suggest the above feature. Applicants submit that a specific particle diameter distribution as defined by the present claims would not have been anticipated or suggested from the teaching of Dalbe et al.

In view of the above, applicants submit that Dalbe et al do not disclose or render obvious the subject matter of present claims as amended above and, accordingly, request withdrawal of this rejection.

Claims 1-20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admission of simple manipulation of commercially available products.

The Examiner first sets forth the following comment.

As shown in Examples 1-8 of the instant specification, the alumina powder having the specific bimodal particle size distribution is simply a result of mixing commercially available alumina powders of two or more different particle sizes. Simple mixing of commercially available inorganic powders is not inventive because it requires nothing more than the basic knowledge of one of ordinary skill in the art.

In response, applicants submit that the present invention is more than a simple mixing or a simple manipulation of commercially available products, and that applicants have selected specific conditions that lead to results that are not obtained from a simple mixing of any commercially available inorganic powders.

As discussed above, it is clear from a comparison of Examples 5 to 7 which are within the scope of the present claims with Examples 1 to 4 which are outside the scope of the present claims and Comparative Examples 1 to 4, the inorganic powder exhibits excellent performance in both of dielectric breakdown strength and epoxy resin viscosity, when the percentage of particles having a particle size of from 2 to 8 um is from 0 to 15 mass%. The combination of these results was not achieved when the percentage of particles having a particle size of from 2 to 8 um was more than 15 mass%. Thus, the present invention requires more than the basic knowledge of one of ordinary skill in the art

In view of the above, applicants request withdrawal of this rejection.

Claims 2-10, 12-15 and 20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over JP 56-000834 as applied to claims 1, 11, and 16-19 above, and further in view of the "discussion below".

As discussed above, as is clear from a comparison of Examples 5 to 7 which are within the scope of the present claims with Examples 1 to 4 which are outside the scope of the present claims and Comparative Examples 1 to 4, the inorganic powder exhibits excellent performance in both of dielectric breakdown strength and epoxy resin viscosity, when the percentage of particles having a particle size of from 2 to 8 um is from 0 to 15 mass%. The combination of these results was not achieved when the percentage of particles having a particle size of from 2 to 8 um was more than 15 mass%.

JP 56-000834 neither discloses nor suggests the above feature, and a specific particle diameter distribution as defined by the present claims would not have been anticipated or suggested from the teaching of JP 56-000834.

In view of the above, applicants submit that JP 56-000834 does not disclose or render obvious the subject matter of present claims as amended above and, accordingly, request withdrawal of this rejection.

Claims 7-10, 12-15 and 20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,284,829 to Dalbe et al as applied to claims 1-6, 11, and 16-19 above, and further in view of the "discussion below."

As discussed above, as is clear from a comparison of Examples 5 to 7 which are within the scope of the present claims with Examples 1 to 4 which are outside the scope of the present claims and Comparative Examples 1 to 4, the inorganic powder exhibits excellent performance in both of dielectric breakdown strength and epoxy resin viscosity, when the percentage of

particles having a particle size of from 2 to 8 um is from 0 to 15 mass%. The combination of these results was not achieved when the percentage of particles having a particle size of from 2 to 8 um was more than 15 mass%.

Dalbe et al neither disclose nor suggest the above feature, and a specific particle diameter distribution as defined by the present claims would not have been anticipated or suggested from the teaching of Dalbe et al.

In view of the above, applicants submit that Dalbe et al do not disclose or render obvious the subject matter of present claims as amended above and, accordingly, request withdrawal of this rejection.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860


WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: November 5, 2010

Respectfully submitted,



Sheldon I. Landsman
Registration No. 25,430